

B2
cont.

4. (Amended) The method of claim 2, wherein at least some of the inverse of desired lands have a width greater than 150 nanometers.

SUB
C2

B3

11. (Amended) A method of making a data storage disk master comprising:
providing a master substrate;
specifying a thickness of photosensitive material;
coating the master substrate with the specified thickness of photosensitive material;
exposing the photosensitive material to a controlled amount of optical energy; and
exposing the photosensitive material to developer solution,
wherein the specified thickness of photosensitive material, the controlled amount of optical energy, and the exposure to developer solution collectively define on the master an inverse pattern of specified lands and grooves to be created in a replica disk.

SUB
C3

B4

14. (Amended) The method of claim 11, wherein at least some of the inverse pattern of specified grooves have a depth greater than 50 nanometers.
15. (Amended) The method of claim 11, wherein at least some of the inverse pattern of specified lands have a width greater than 150 nanometers.

SUB
C4

B5

19. (Amended) A method of making a data storage disk master comprising:
providing a master substrate;
specifying a thickness of photosensitive material;
coating the master substrate with the specified thickness of photosensitive material;
exposing the photosensitive material to a controlled amount of optical energy; and
exposing the photosensitive material to developer solution,
wherein the specified amount of photosensitive material, the controlled amount of optical energy, and exposure to the developer solution collectively define a pattern on the master having an inverse of desired surface variations to be formed in a replica disk.

SU2
C5

29. (New) A method comprising:
creating a master disk for use in a process in which the master disk is used to create a first generation stamper, the first generation stamper is used to create a second generation stamper, and the second generation stamper is used to create replica disks; and
creating a pattern in the master disk to have an orientation that is inverse of a desired pattern for the replica disks.

30. (New) The method of claim 29, wherein creating the pattern in the master disk having an orientation that is inverse of the desired pattern for the replica disks includes creating grooves in the master disk that correspond to lands to be created in the replica disks, wherein the grooves in the master disk extend down to a master disk substrate to define flat master groove bottoms such that lands created in the replica disks have flat land tops that have an inverse orientation to the flat master groove bottoms in the master.

31. (New) The method of claim 30, wherein the flat master groove bottoms have a width greater than 100 nanometers defined by the master substrate.

B6

32. (New) The method of claim 29, further comprising:
creating the first generation stamper using the master disk;
creating the second generation stamper using the first generation stamper; and
creating the replica disks using the second generation stamper, wherein the replica disks are formed with the desired pattern.

33. (New) The method of claim 29, wherein creating the pattern in the master disk having an orientation that is inverse of the desired pattern for the replica disks includes creating lands on the master that correspond to grooves to be created in the replica disks, wherein the lands on the master have rounded tops.

34. (New) The method of claim 33, wherein the grooves in the master disk extend down to a master disk substrate to define flat master groove bottoms.

SUB
C6

35.

(New) A method comprising:

creating a master disk;

creating a pattern in the master disk to have an orientation that is inverse of a desired pattern for the replica disks;

creating a first generation stamper using the master disk;

creating a second generation stamper using the first generation stamper; and

creating the replica disks using the second generation stamper, wherein the replica disks exhibit the desired pattern.

B6
cont.